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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,204	09/12/2003	Jason C. Lail	C0025A	7216
21495	7590	08/24/2004	EXAMINER	
CORNING CABLE SYSTEMS LLC			HYEON, HAE M	
P O BOX 489			ART UNIT	PAPER NUMBER
HICKORY, NC 28603			2839	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,204

Applicant(s)

LAIL ET AL.

Examiner

Hae M Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 6,15-17,27,36-38,50,51,54,55 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-14,18-26,28-35,39-49,52,53,56,57,59 and 60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 6, line 27, the full terminology for the abbreviation "MAC" is required.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 18, 39, and 59 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 18, 39, and 59 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed on September 12, 2003. In that paper, applicant has stated the invention is an optical tube assembly having a dry insert, and this statement indicates that the invention is different from what is defined in the claim(s) because a MAC number of an optical waveguide is a property of the optical waveguide. Page 5, lines 26-33 explains that many different types of optical waveguides can be used with the instant invention "an optical tube assembly" such as a plurality of loose optical waveguides, a ribbon stack or a bundled optical waveguides. Also, page 7, lines 8-9 state that the optical waveguides 12a have a **predetermined** MAC number. Thus, the optical waveguide having specific value of the MAC number recited in claims 18, 39, and 59 are already existing element which can be used with the instant invention.

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4. Claims 2, 3, 10-14, 21, 23, 24, 29-33, 42, 43, 45, 48, 49, and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims recite a percentage of compression of the dry insert, a value of a normalized pull-out force of an optical waveguide, and an optical attenuation value. It is not clear how the values of compression, normalized pull-out force and optical attenuation are achieved since claims do not explain the structural size and relationship of the elements of the optical tube.

5. Claim 3 recites the limitation "the foam tape" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 7-14, 18-26, 28-35, 39-49, 52, 53, 56, 57, 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bringuier (6,122,424) in view of Fujiura et al (5,838,863) and Anderson et al (6,377,738 B1).

Bringuier discloses an optical tube assembly comprising a tube 15, at least one optical waveguide 12 disposed in the tube 15, and at least one dry insert having two layers 20, 30 surrounding the optical waveguide 12. The layer 20 of the dry insert includes a conventional super absorbent material 31 to provide water-swellaable layer. The layer 30 is a compressible

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layer formed from polyurethane spunbonded fabric, which includes a porous web structure of non-woven fibers with interstices comprising air cells or pockets. However, Bringuier does not disclose a percentage of compression of the dry insert, a value of a normalized pull-out force of an optical waveguide, and an optical attenuation value. Also, Bringuier does not disclose the layer 20 to be a tape layer and the layer 30 to be a foam layer.

Anderson discloses an optical fiber cable 10 comprising a water-swellaable tape layer 32 to protect the cable 10 from moisture. Fujiura discloses an optical cable having polyurethane foam layer 1 surrounding optical waveguide, which also includes water absorbent material to block moisture from entering into the cable. Also, water-swellaable tape and foam layer are commonly known in the art of an optical fiber cable.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the optical tube assembly taught by Bringuier such that it would have water-swellaable tape as taught by Anderson and polyurethane foam layer as taught by Fujiura to protect the optical tube from moisture.

Regarding to the percentage of compression of the dry insert, the value of a normalized pull-out force of an optical waveguide, and the optical attenuation value, these values are depended on sizes of the elements the optical tube assembly. Since the claims do not recite how these values are obtained, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the sizes of the elements of the optical tube to obtain the desired values of compression of the dry insert, normalized pull-out force of the optical waveguide and optical attenuation because it only deals with changing in size. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*,

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105 USPQ 237 (CCPA 1955). Regarding to different materials for elements of the optical tube assembly, it only deals with the use of preferred material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 4,705,571 by Lange et al., US Patent No. 4,815,813 by Arroyo et al., US Patent No. 5,621,842 by Keller, US Patent No. 6,178,278 B1 by Keller et al., US Patent Application Publication No. 2002/0009272 A1 by Parris and GB-2189071 A by Marsh et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose AU is 2839 and whose telephone number is (571) 272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any response to this action may be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Hae M Hyeon
Examiner
Art Unit 2839

hnh hnh

Hae Moon Hyeon